

XIV.—*On some Indian Psychidæ.*—By F. MOORE, F. Z. S.

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Genus BABULA (Moore).—Wings short, broad, sparsely covered with short very slender brown hair-like scales. *Forewing* triangular; costal margin slightly arched from the base to near its end, the apex rounded, exterior margin oblique; cell broad, extending to beyond half the length of the wing; costal vein at its base some distance from the costal margin; sub-costal vein angled near end of the cell, five-branched, the first and second branches parallel, the first arising at some distance and the second at an angle before end of the cell, third branch trifurcate at one-fourth beyond end of the cell; discocellular veinlets bent inward at the middle, the radial vein extending from their angle; within the cell are two discoidal veinlets starting from the upper and lower end of the second discocellular, these coalescing near middle of the cell area and extending to its base; median vein four-branched, angled at its lowest branch, the two upper branches contiguous and starting together from end of the cell, the two lower branches wide apart; submedian vein convexly-angled upward at its middle, and with a short outwardly-oblique lower spur starting from one-fourth of its base. Hindwing oval, broad; subcostal vein two-branched, the first branch arising before end of the cell; the cell broad; upper discocellular veinlet angled outward, the radial extending from the angle; two discoidal veinlets within the cell starting from the upper and lower end of the second discocellular veinlet and coalescing at the middle of the cell area; median vein angled at end of the cell, four-branched, the two upper branches starting from angles at end of the cell; a submedian and two internal veins. *Body* slender; abdomen short, slightly pilose; palpi small, pilose; antennæ short, bipectinated, the pectinations delicately plumose and long at base of the shaft; legs slender, nearly naked, middle and hind tibiæ with a long appendage.

BABULA GROTEI (Moore).—Upper and underside uniformly pale cupreous-brown. Wings sparsely covered with short very slender laxly-disposed hair-like scales; cilia long, dense. Expanse of wings $\frac{1}{2}$ th of an inch.

HABITAT. Calcutta. (Type in Coll. F. Moore).—The type specimen was reared from larva, found by the late Arthur Grote, near Calcutta, feeding upon the Bábul (*Acacia arabica*). The larva forms an elongated, narrow, cylindrical case about three-fourths of an inch long, and uniformly covered with minute granular particles of bark.

The following are descriptions of two allied genera and species of

Psychids—one of which is found in the Calcutta District, the other in the N. W. Himalayas. These two forms are as follow :—

Genus *RASICOTA* (Moore).—Wings sparsely clothed with short whitish hair-like scales. *Forewing* short, narrow, triangular; costal margin arched before the end, apex somewhat acute, exterior margin oblique, posterior margin short; costal vein short; subcostal vein three-branched, second and third starting from end of the cell; the cell narrowest at its upper end; discocellular veinlets oblique, angled outward; radial vein from their angle; a discoidal veinlet emitted within the cell from end of lower discocellular; median vein four-branched, the two upper branches on a foot-stalk from end of the cell; submedian vein with a lower branch from its middle towards the base. *Hindwing* short, apex convex; subcostal vein two-branched; radial vein from below end of the cell; discoidal veinlet within the cell from end of lower discocellular; four median branches; a submedian and an inter-venal vein. *Body* moderately robust, abdomen extending beyond the hindwings; antennæ bipectinated, plumose.

RASICOTA ALBESCENS (Moore).—Fuliginous-white, wings and body sparsely clothed with short whitish hair-like scales; antennæ and anal segments fulvous-yellow. Expanse $\frac{1}{12}$ ths of an inch.

HABITAT. Calcutta District (*Arthur Grote*).

This species forms a long, narrow, somewhat naked fusiform silken case.

Genus *MOFFATIA* (Moore).—*Forewing* long, rather narrow, apex somewhat acute, exterior margin oblique, posterior margin short; costal vein stout, distant at the base from the costa and extending two-thirds from the base; subcostal vein slender, scarcely apart from the costal, four-branched, the fourth or lower branch extending to a little below the apex, the first branch emitted before end of the cell, second branch from end of the cell, third branch at half-way between the cell and the apex and terminating on the costa above the apical angle; discoidal cell long, reaching two-thirds of the wing, very narrow at the base and widening out at the end; discoidal veinlet within the cell, slender, anastomosing with the median vein near its base; upper and lower discocellular veinlets of equal length, bent inward at their juncture; two radial veins, one from the upper end of the discocellulars, the other from the angle of their junction; median vein stout, four-branched, the two lower branches extending to near the posterior angle, the two upper to middle of the exterior margin and anastomosed at their base; submedian vein long, extending to the angle, recurved, with a wide interspace between it and the median vein, and emitting a short, straight lower branch at half its length. *Hindwing* short, trian-

gular; costal margin convex, apex acute, exterior margin convex; costal vein slender, subcostal reaching to the apex; cell broad; discoidal veinlet slender, straight, emitted within the cell from lower angle of the upper discocellular veinlet and extending to base of the cell; a radial veinlet emitted from upper angle of the discocellular and terminating below the apex, lower discocellular oblique, straight; median vein long, three-branched, the branches at equal distance; submedian vein and internal veins long, extending to the margin. Antennæ broadly bipectinated, the branches plumose to the tip; thorax thick, round, plumose; head and palpi inconspicuous, hidden in dense plumose hairs; abdomen very long, extensile and mobile, densely covered with long plumose hairs, and ending in a naked point which is either concealed by the long hairs extending like a tail beyond the abdomen, or exposed, the plumose hairs parting and curling outwards and upwards; legs nearly naked; forelegs very long, tibia with a long spur; first joint of tarsus as long as all the rest; middle legs shorter; hindlegs shortest and more slender.

MOFFATIA PLUMICAUDA (Moore).—Wings hyaline, fuliginous, very sparsely covered with minute hair-like scales, not sufficiently numerous to detract from the perfectly vitreous appearance of the wings; costal margins and the cilia fuliginous-black; veins distinct and black. Antennæ black, bipectinated, the branches plumose to the tip; thorax and head covered with dense black plumose hairs; abdomen of a reddish-yellow where naked, but appearing densely black from the long black plumose-hairs which cover it; anal point naked or concealed by long plumose-hairs like a tail, the hairs parting and curling outward and upward; legs black. Expanse 1 inch.

HABITAT. Upper Kunáwar, N. W. Himalaya. (In Coll. Col, A. M. Lang and F. Moore).—"Larval case fusiform, about $1\frac{1}{4}$ inch in length, formed of tough silk covered with short sticks of dry grass. The larva feeds with the three anterior segments protruded from the portable case. The pupa before emergence of imago inverts its position within the case, and the imago emerges from the upper pointed end, the lower, blunter end is closed by a film of silk firmly attached to some rock. The imago is observed basking on rocks, and flies off, when disturbed, with very rapid and devious flight, more like a wasp or bee than a moth. It is seen flying from morning till 4 p. m., chiefly on cliffs, from end of October and November." (Lang's MS., notes.)